

2003 UW-Madison Faculty/Staff Computing Survey

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An Overview: Survey Highlights

Computer use (page 5)

- Increases in IT ownership appeared across the board:
 - PDA ownership increase from 15% last year to 22%.
 - The percentage of laptop owners rose from 25% last year to almost 40%.
 - Cell phones continue to be popular, with ownership rates rising to 57% from 44% in Fall, 2001.
- Among computer owners, there was a substantial increase in the use of Windows NT/2000/XP, rising from 9% to nearly 59% in two years.
- There appears to have been a decline in Faculty/Staff cell phone users on campus, from 44% last year to 23% this year.
- Among UW computers, there was also an increase in Windows NT/2000/XP use, increasing from 38% to 70% in two years.

Internet use (page 8, 10)

- Internet use held steady during the past year, at an average of 19 hours per week. Staff (19.6 hrs) tended to use the Internet more than faculty (17.8 hrs), but this difference was not significant.
- Reported use of the WiscWorld modem pool dropped for the third year in a row, while cable modem use remained steady at 14% and DSL continued to increase.
- Asked about their satisfaction with their chosen mode of Internet access, cable modems scored the highest ratings while commercial ISP modems received the lowest ratings.
- Peer-to-peer file sharing and streaming media will be among the most popular Internet applications faculty and staff will use in the next six months.

Tech Store and DoIT Services (page 12, 16)

- Technical support is clearly the most important computing service, relative to seven other services.
- Respondents tend to think of department experts and local retailers when they need installation, repair, and tech support.
- The online catalogue continues to be the most-used service among DoIT customers, who report using the catalogue an average of 4 times in the past six months.
- Satisfaction ratings with Tech Store service remained largely stable but for the Sales Counter, which dropped from a rating of 4.2 last year to 3.8 this year.
- Recent Tech Store customers gave quality and delivery of products the highest satisfaction ratings. Pricing received the lowest satisfaction rating.

My UW-Madison (page 19)

- “Customizable library resources” was allocated more money by both faculty and staff than any other service listed. This was nearly the only agreement between the two groups, with staff much more strongly emphasizing payroll and benefits, and with

faculty preferring to spend more money on a course management system and adviser database.

- Besides the services listed, both faculty and staff mentioned email and calendaring as important aspects of a portal service.

Wireless (page 20)

- 55% of faculty and staff (as opposed to 57% in 2002) have heard or seen something about the wireless network.
- Overall, respondents gave a mean rating of 2.2 (5-point scale) when asked how likely they were to use the wireless network in the next 12 months.
- Faculty and laptop owners were more likely to use the wireless network in the next year than the general population.

Training (page 22)

- Interest in training dropped to 54% of faculty and staff, down from 66% last year.
- DoIT has become somewhat less preferred as a source of training.
- The topics requested most for training areas were web page development, databases and some brand applications such as Excel and Word.

Rules of the Road (page 23)

- Faculty/staff awareness of DoIT's Rules of the Road campaign remained at 33%.
- Posters dropped in awareness over the past year, probably because no new posters were distributed during the past year.
- Streaming media continues to be the least-used publicity vehicle in this campaign.

Background and Objectives

The 2003 UW-Madison Faculty/Staff Computing Survey was the latest in DoIT's annual attempt to gauge IT needs, concerns, and performance on the UW campus. Specific objectives of the survey were to:

- Continue to monitor faculty/staff awareness and use of computing services
- Obtain respondent perceptions of DoIT's performance in providing products/services in a competitive environment
- Document changing information technology behavior
- Determine relative importance of and preference for new product and service concepts
- Provide actionable research for training, My UW-Madison, and web services

Methodology

The 2003 Faculty/Staff Computing Survey was e-mailed to 1,000 randomly selected UW-Madison Faculty and Staff on October 17, 2002. Two follow-up e-mailings were sent on October 21 and October 24. Returns were collected until October 31. The survey was in the field for 2 weeks.

Of the 1,000 emails initially sent out, 41 were judged undeliverable.¹ Of the remaining 959 respondents, 407 completed the survey for a final response of 42.4% (407/959 completed surveys). An additional 55 respondents completed portions of the survey. These individuals are included in the report, but not in the computation of final response rates.

The distribution of respondents' classification (faculty, instructional staff, academic staff or classified staff) was compared with the UW's actual distribution of classification. A weight which took into account the slight disparity between the two distributions was computed and applied to the data. An approximation of the survey margin of error is +/- 4.8 percent.

The questionnaire took an average of 21.6 minutes to complete, but this figure is inflated by outliers. A more telling statistic is the median completion time, which was 13.2 minutes.

The survey was fielded by DoIT's Business and Financial Applications group. Population sampling, survey design, data analysis, and report writing were conducted by DoIT Communications.

¹Another 83 respondents opted out of the survey. Those faculty and staff who did not want to complete the survey simply clicked on a link in the email.

Notes on Data Analysis

The number of respondents upon which percentages are calculated can change from question to question. Some respondents simply skip a question, others are instructed to skip a question. Because of this, the number of respondents is usually included in each Table in the Frequency Runs and Analysis section. Generally, the figures reported here take into account only those individuals who answered the question.

Respondents were often encouraged to respond to all relevant response options within a question. In these cases column percentages will usually sum to more than 100. In the Frequency Runs and Analysis section, these cases can be identified by instructions at the end of the question, [**CHECK ALL THAT APPLY**].

Some analysis in the following tables compares data between different groups of respondents. This is an attempt to understand both the data and our customers more completely. In these tables, the last column indicates whether the differences tested can be considered statistically significant. There are two levels of significance used, called alpha levels. Basically, these figures indicate how often we would expect the results if they were simply a matter of chance. Thus, when a test statistic has a probability of less than .05, this means such results are relatively rare and would be expected to occur less than five percent of the time. All the reader needs to know is that the more asterisks in the last column, the more likely it is that real differences exist between or among the groups being compared.

In general, care should always be taken in interpreting data, keeping in mind the context and wording of the question, what response options, if any respondents were asked to choose, etc. Where a specific response scale was used (such as a Likert scale, ranking, etc.) this information is highlighted in or at the end of the question.

Computer and IT ownership

Overall computer ownership stands at 90%. There were noticeable gains in ownership of laptops, PDAs, and cell phones. The percentage of owned computers with a network OS such as NT, 2000, or XP rose from 9% in 2001 to 59% in this year's survey. Linux use has also grown from 2% to 6% in three years.

Among IT products used on campus, PDA use has doubled from three years ago, while cell phone use has decreased. Windows NT/2000/XP now account for 70% of operating systems on campus.

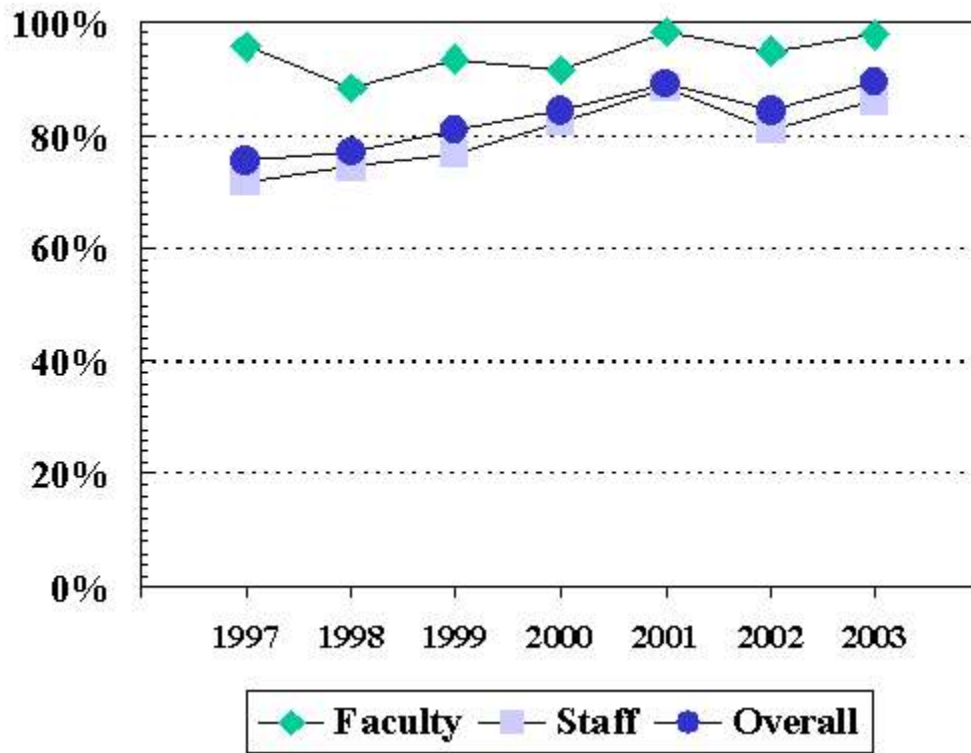
1. Which of the following information technology products do you own?

	2001 (n=467)	2002 (n=252)	Fall, 2002 (n=462)
Desktop	79.7%	84.5%	83.5%
Laptop	28.7%	25.0%	39.5%
PDA (PalmPilot, PocketPC, etc.)	9.9%	15.1%	22.0%
Cell/wireless phone	-	44.0%	56.7%

2. Which operating systems do you use on the computer you own?

	2001 (n=467)	2002 (n=244)	2003 (n=408)
Windows 95/98/ME	61.0%	60.3%	54.2%
Windows NT/2000/XP	8.7%	21.3%	58.5%
Mac	21.3%	22.6%	25.8% v.9< = 10.6% v.8> = 15.2%
Linux	2.3%	4.1%	6.2%
Unix	0.4%	0.8%	4.3%
Other	0.5%	4.9%	2.7%

Computer ownership



3. Which of the following information technology products do you regularly use at the UW?

	2001 (n=467)	2002 (n=252)	2003 (n=462)
Desktop	79.7%	84.5%	87.8%
Laptop	28.7%	25.0%	29.1%
Personal Digital Assistant (PalmPilot, PocketPC, etc.)	9.9%	15.1%	19.9%
Cell/wireless phone	-	44.0%	22.8%

4. Which operating systems do you use on the computer you use at the UW?

	2001 (n=467)	2002 (n=244)	2003 (n=426)
Windows NT/2000/XP	37.8%	53.1%	70.1%
Windows 95/98/ME	50.3%	33.8%	36.7%
Macintosh	19.9%	26.1%	25.2% v.9 <= 11.4% v.8 <= 13.8%
Unix	8.6%	9.0%	7.5%
Linux	3.1%	7.0%	5.7%
Other	2.1%	3.3%	2.6%

Internet use

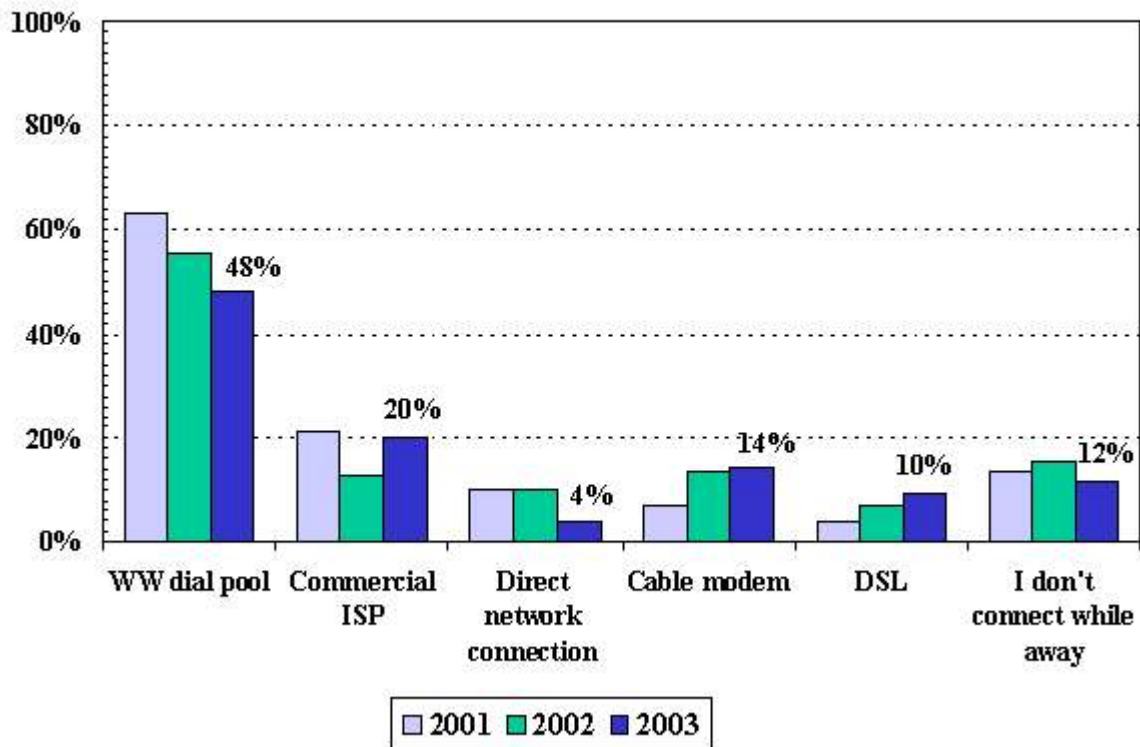
Reported Internet use remained steady this year, at an average of 19 hours per week. Staff tend to spend significantly more time online (20 hours per week) than faculty (13 hours per week). At home, fewer faculty and staff are using the WiscWorld modem pool to connect to the web. Cable modem use has leveled off this year around 14%, but DSL continues to grow in popularity, currently at 10%. Not surprisingly, broadband users report the greatest satisfaction with the performance of their connection.

5. On average, how many hours per week have you spent online in the past six (6) months?

Faculty and Staff spent an average 19 hours per week (median=11.2 hours) connected to the web, similar figures to last year. Staff tended to spend significantly more time online each week (20 hours) than faculty did (13 hours).

6. When you are at home or off-campus, how do you access the Internet? [Check all that apply]

Faculty and staff Internet connections



7. Overall, how satisfied are you with the performance of [insert each applicable Internet mode from q6]?

	2003 (5-point scale)
Cable modem	4.2 (1.0)
DSL	4.0 (1.1)
Direct network connection to campus	3.6 (1.0)
WiscWorld modem pool	3.5 (.99)
Commercial ISP	3.3 (1.0)

8. Why do you use an ISP to connect to the Internet?

A follow-up question was asked of commercial ISP, DSL and cable modem users in order to determine why they paid for such a service when a free one (WiscWorld) was available to them.

	2002 (n=84) (closed-ended)	2003 (n=172) (open-ended)
Quality/speed is better with my commercial ISP	36.9%	35%
To keep personal use separate from work	51.4%	20%
Already had a commercial ISP, service was pre-installed on my computer	12.0%	16%
Other	15.3%	29%

Campus network

Users of the campus network rated its performance well, with a mean rating of 4 on the same scale used in question 7. About 2/3 of respondents indicated awareness of the network upgrade. The most popular Internet uses in the next six months will be file-sharing and streaming media. Significantly more staff than faculty predicted using “instant messaging,” and “live video, academic television.”

9. Overall, how satisfied are you with the performance of the existing campus network which provides Internet service?

On a 5-point scale, where 1=very dissatisfied and 5=very satisfied, respondents gave an average satisfaction rating of 4.0 to the network’s performance. There were no significant differences between faculty and staff.

10. The campus network is undergoing an upgrade this fall. Are you aware of this new network upgrade?

Approximately 66% of faculty and staff were unaware of the upgrade.

11. Which of these Internet applications do you expect to use on the campus network in the next six months?

	2003 (n=422)
peer-to-peer file sharing	38.8%
streaming music or video	27.6%
instant messaging	17.1%
live video conferencing	12.0%
live video, academic television	11.0%
online chat	9.6%
IP telephony (Internet phone service)	6.2%

12. Which other new Internet applications do you expect to use on the campus network in the next six months?

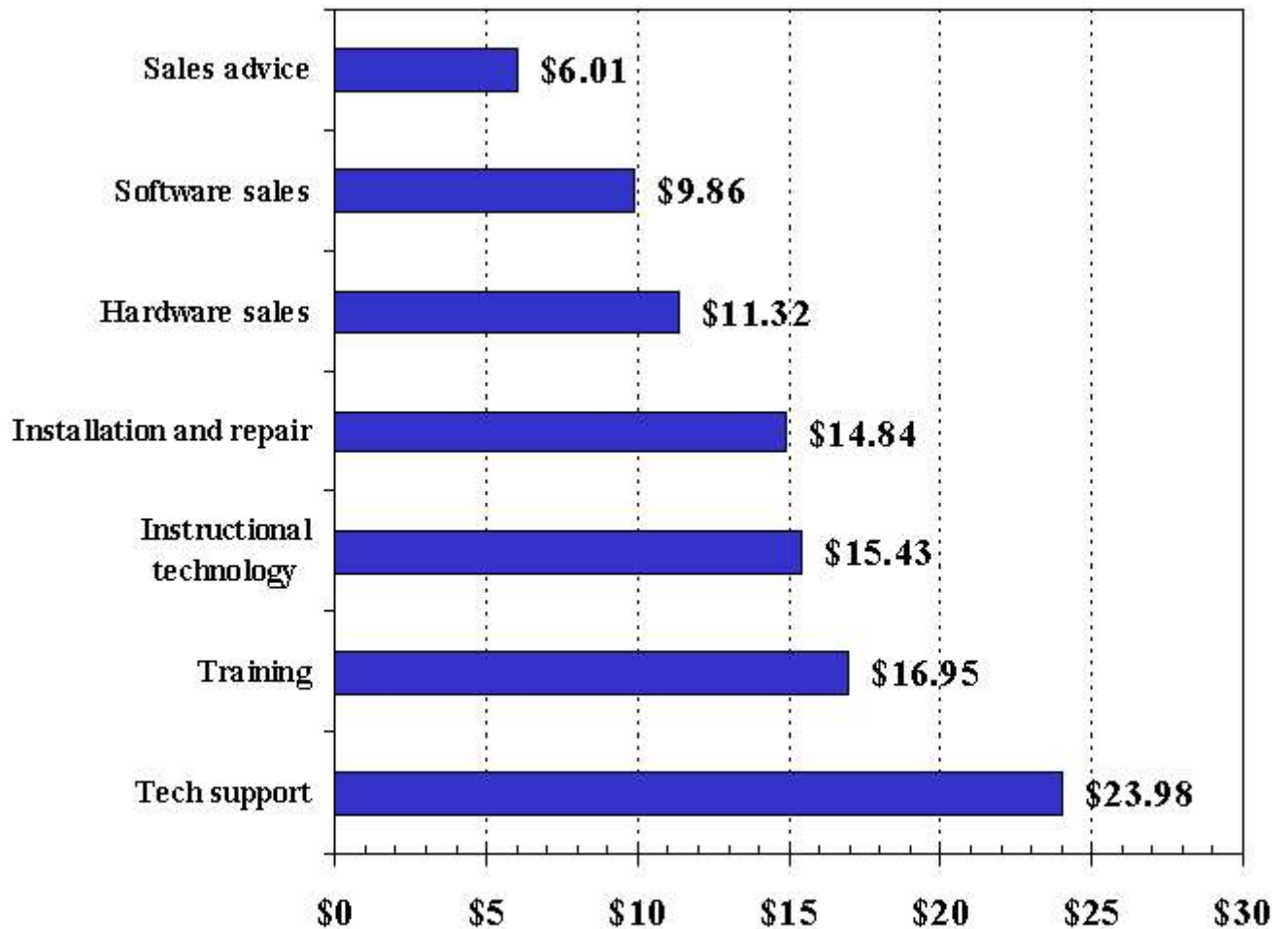
	2003 (n=68)
Don't know/Not sure	31%
None	29%
Website - general	8%
File-sharing	7%
More access - general	7%

Computing services and DoIT's "position"

Technical support is preferred by our audience far more than any other of the seven services asked about. Sales advice is the least-preferred service. Looking at the perceptual maps below, one can see the changes between the two years' maps. "Training" has moved away from DoIT and software sales--though less important--has moved closer to DoIT. There is also a trend consolidating repair and support among department experts, local retailers and do-it-yourselfers.

13. Below is a list of factors that can affect the experience of owning or operating computers and other information technology. Assuming you had \$100 to split up among them, how much would you allocate to each of the following services? If you don't want to allocate any money to an area just write "0."

Relative preference for seven computing services



14. Thinking about your computing and information technology needs, indicate the one provider you are most likely to choose for each service using the scale below.

1=Self

2=Local retailer (e.g., Advantage Computers, Madison Computer Works, etc.)

3=Friend/relative

4=DoIT

5=Department or resident expert

6=Large chain store (e.g., Circuit City, CompUSA)

7=Mail order (e.g., Dell, NewEgg.com)

8=UW school or college support units

Sales advice	1	2	3	4	5	6	7	8
Technical support	1	2	3	4	5	6	7	8
Installation and repair	1	2	3	4	5	6	7	8
Hardware sales	1	2	3	4	5	6	7	8
Software sales	1	2	3	4	5	6	7	8
Instructional technology	1	2	3	4	5	6	7	8
Training	1	2	3	4	5	6	7	8

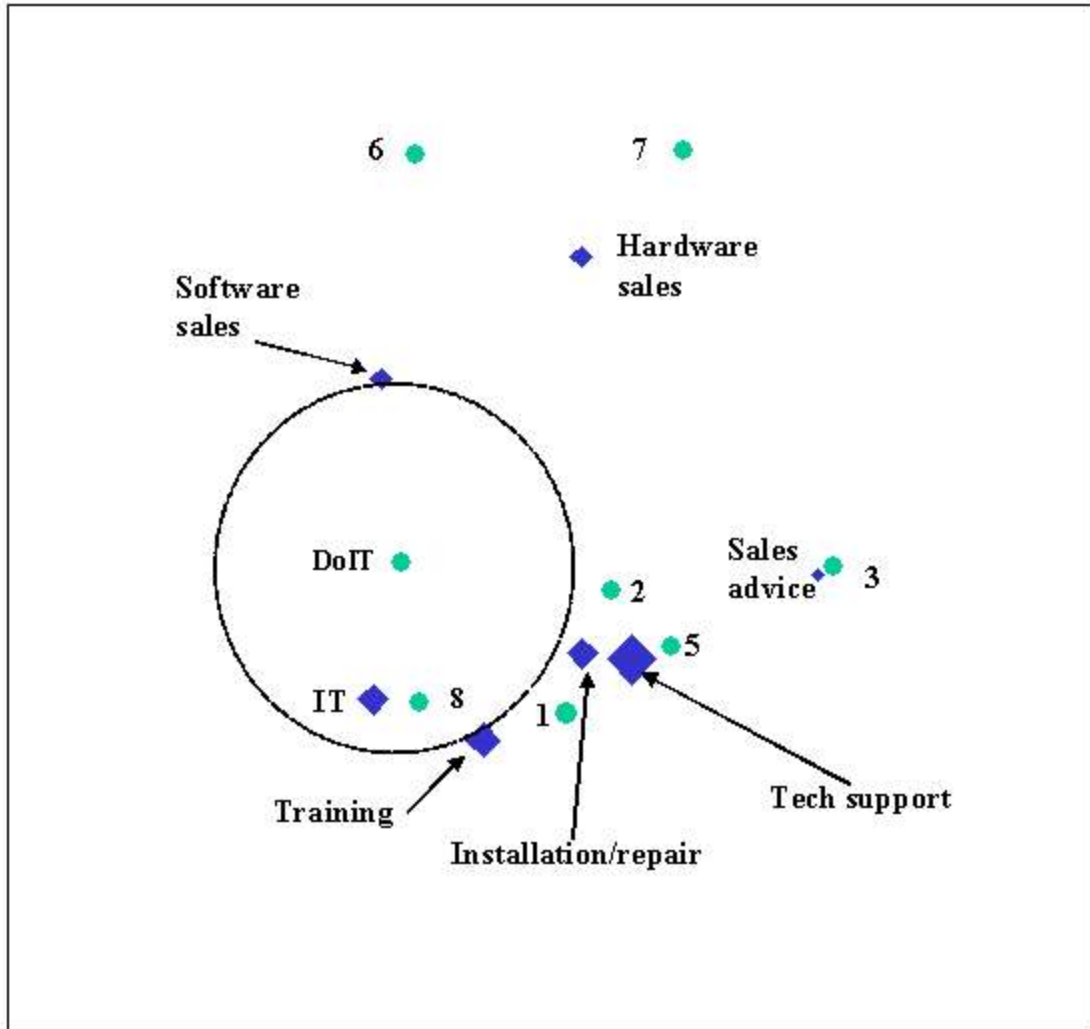
This question is designed to create a perceptual map. Using a technique called correspondence analysis, the following figures graphically display the results of this question for the past two years.

Perceptual maps afford us a wealth of information in an visual format. Perceptual maps are often used in “positioning” studies because they shows the position of each variable relative to all other variables. And those relationships change over time.

Service providers are represented as circles (identified by numbers and a legend) and services are triangles. The reader can see which computer retailers are associated with particular attributes by looking at the distances between a provider and a service. Basically, items closer to each other on the map indicate greater preference.

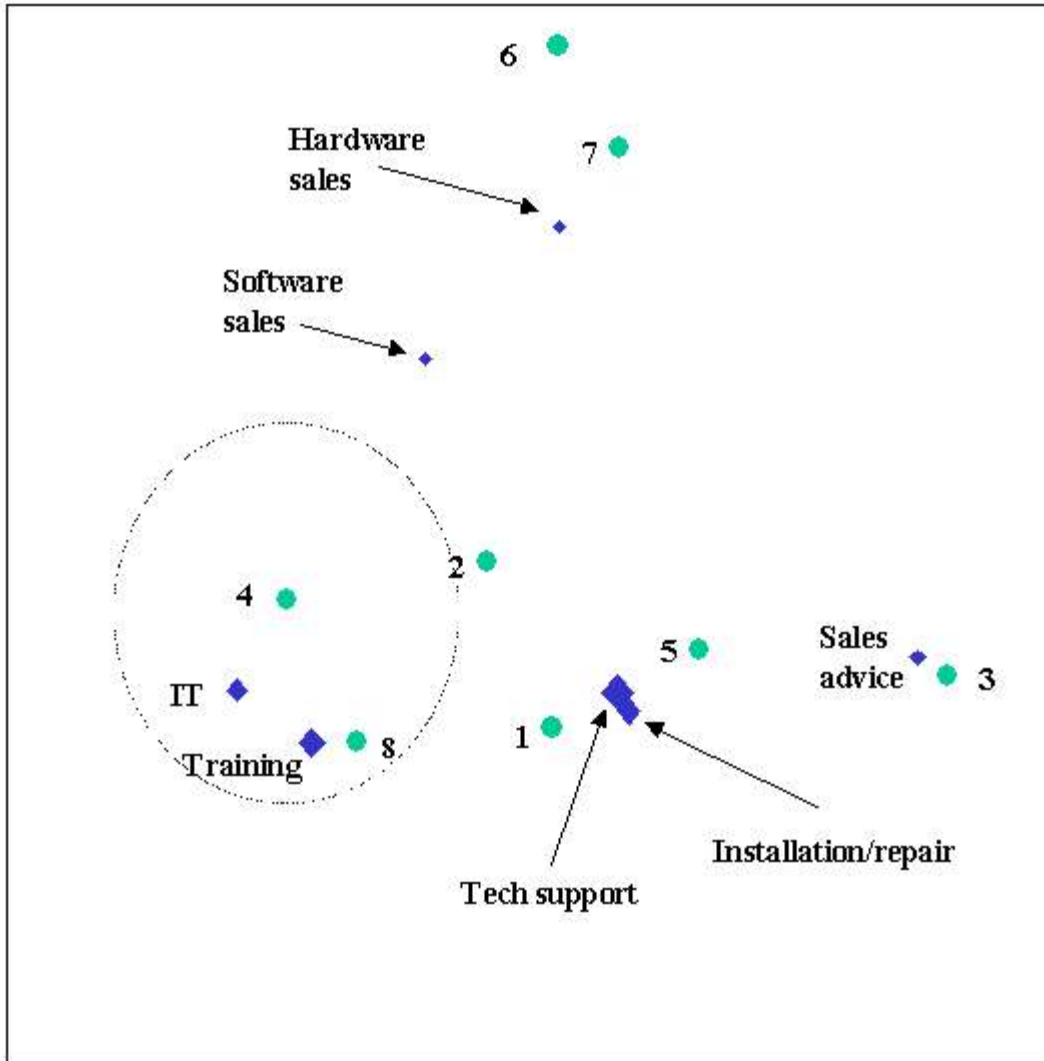
Also, we know that our customers find some services more valuable or important than others (see question 13). This piece of information aids interpreting the map, and is shown in the size of triangles. The larger the triangle, the more important the service.

2003 Perceptual Map – Faculty/Staff



- 1 = Myself
- 2 = Local retailer
- 3 = Friend/relative
- 4 = DoIT
- 5 = Department or resident expert
- 6 = Large chain store
- 7 = Mail order
- 8 = UW school or college support units

2002 Perceptual Map - Faculty/Staff



- 1 = Myself
- 2 = Local retailer
- 3 = Friend/relative
- 4 = DoIT
- 5 = Department or resident expert
- 6 = Large chain store
- 7 = Mail order
- 8 = UW school or college support units

Tech Store

There has been very little substantive change in awareness levels among Tech Store areas. Help Desk continues to enjoy high awareness and use. The online catalog gamers the most use per individual. With the exception of the rental program which only had five ratings, there was little dispersion among satisfaction ratings of Tech Store areas. Customers are generally satisfied with many aspects of their purchasing experiences at the Tech Store.

15. Which of the following DoIT Tech Store services are you aware of? [Check all that apply]

	Awareness		
	2001 (n=475)	2002 (n=275)	2003 (n=406)
Help Desk by telephone (264-HELP)	85.3%	90.7%	90.1%
Sales and advice	83.3%	84.5%	87.4%
Installation and Repair	70.0%	71.4%	65.3%
Online catalogue	-	67.0%	63.2%
Help Desk walk-in area at DoIT	62.2%	62.5%	60.8%
Help Desk - by web (Help Online)	70.4%	56.4%	59.6%
DoIT Rentals (renting laptops, zip drives, etc.)	-	35.3%	29.0%

16. About how many times did you use each of the following DoIT Tech Store services during the past six (6) months?

	Use among aware respondents			
	2001	2002	2003	Mean frequency used past 6 months
Online catalogue	-	69.2%	69.3%	4.0
Help Desk by telephone (264-HELP)	58.7%	63.9%	66.7%	3.1
Sales and advice	50.3%	58.6%	56.4%	1.8
Help Desk - by web (Help Online)	24.1%	29.2%	28.5%	0.9
Installation and Repair	29.5%	35.1%	36.5%	0.8

	2001	2002	2003	Mean frequency used past 6 months
Help Desk walk-in area at DoIT	25.6%	21.1%	25.2%	0.6
DoIT Rentals (renting laptops, zip drives, etc.)	-	3.7%	6.2%	0.1

17. Using the scale provided, please rate your satisfaction these DoIT Tech Store services.

Mean satisfaction ratings			
	2001 (5-point scale)	2002 (5-point scale)	2003 (5-point scale)
	Mean (sd)	Mean (sd)	Mean (sd)
DoIT Rentals (renting laptops, zip drives, etc.)	-	4.0 (1.0)	4.5 (0.6)
Help Desk walk-in area at DoIT	3.6 (1.2)	4.1 (0.8)	3.9 (1.0)
Help Desk by telephone (264-HELP)	3.7 (1.3)	3.9 (1.2)	3.9 (1.1)
Installation and Repair	3.6 (1.2)	3.9 (1.0)	3.9 (1.2)
Sales and advice	3.9 (1.0)	4.2 (0.8)	3.8 (1.0)
Help Desk - by web (Help Online)	3.5 (1.3)	3.3 (0.9)	3.8 (1.0)
Online catalogue	-	3.9 (0.9)	3.7 (0.9)

18. Within the past six months, have you purchased anything through the DoIT Tech Store?

Approximately 41% of all faculty and staff surveyed indicated that they had purchased an item from the DoIT Tech Store in the past six months.

19. Thinking about your most recent purchase, please rate your satisfaction with each of the following areas:

Average satisfaction ratings among Tech Store customers

	2001 (5-point scale)	2002 (5-point scale)	2003 (5-point scale)
	Mean (sd)	Mean (sd)	Mean (sd)
Delivery of product	3.9 (1.2)	4.2 (1.1)	4.2 (1.1)
Quality of product	4.1 (1.0)	4.3 (0.9)	4.1 (1.1)
Resolution of any problems	-	3.8 (1.2)	4.0 (1.0)
Ease of purchase	4.0 (1.1)	4.2 (1.1)	4.0 (1.1)
Phone response to questions after purchase	3.8 (1.3)	3.8 (1.0)	3.9 (1.0)
Accuracy of information from DoIT staff	3.9 (1.2)	4.1 (1.0)	3.9 (1.1)
Knowledge of DoIT staff	3.8 (1.2)	4.0 (1.0)	3.9 (1.1)
Professionalism of DoIT staff	4.0 (1.1)	4.2 (0.8)	3.9 (1.2)
Helpfulness of online catalog	-	3.9 (1.0)	3.8 (0.9)
Responsiveness of DoIT staff	3.9 (1.1)	4.1 (0.9)	3.8 (1.2)
Pricing of product	3.8 (1.1)	3.9 (0.9)	3.7 (1.1)
Overall experience	3.8 (1.0)	4.0 (0.9)	3.9 (1.0)

My UW-Madison

There were many significant differences between faculty and staff in allocating dollars across potential MUM services, but customizable library resources scored well above all other services for both groups. Staff tend to prioritize payroll and compensation services, while faculty favored course management systems and an advisee database.

20. Below is a list of potential views that are being considered for the faculty and staff version of My UW-Madison web portal, your personalized gateway to campus services. Assuming you could split \$100 among them, how much would you allocate to incorporating each of the following offerings into My UW-Madison?

	Faculty Mean	Staff Mean	Statistically Significant
Customizable library resources, access to authorized library journals/indices	\$27.29	\$21.54	*
Payroll/compensation records	\$8.59	\$14.80	**
Managing grant forms and applications	\$13.32	\$12.98	
Calculate pension, access ETF account	\$6.81	\$14.96	**
Course management system, rosters and class lists	\$14.73	\$9.99	**
Access to student records and reports	\$10.19	\$10.25	
Grades processing and reporting	\$9.86	\$8.47	
Comprehensive information on advisees for all advisors	\$11.01	\$7.16	**

*= p<.05; **=p<.01

21. What other services would you like to see in the My UW-Madison web portal?

	2003 (n=78)
Do not know/use	32%
None	7%
Calendar	6%
Email	6%
Training	5%

Wireless

A bit more than half of faculty and staff (55%) are aware of the wireless network. A minority, mostly faculty and laptop owners, plan to use the network in the next year; on a 5-point likelihood scale, respondents provided a mean rating of 2.2.

22. In the summer of 2000, the UW campus installed a wireless network with access at 12 locations. Have you heard or seen anything about this development?

55% of faculty and staff (compared with 57% last year) have heard or seen something about the wireless network. There were no significant differences between faculty and staff.

23. Wireless technology allows laptop users to connect to the campus network to surf or check email at different places around campus, at speeds similar to a direct network connection. How likely will you be to use the campus wireless network in the next 12 months?

	2003 (n=405)
1 - very unlikely	50.0%
2	14.5%
3	14.4%
4	9.1%
5 - very likely	12.0%

24. What is the top reason you would not use the wireless network?

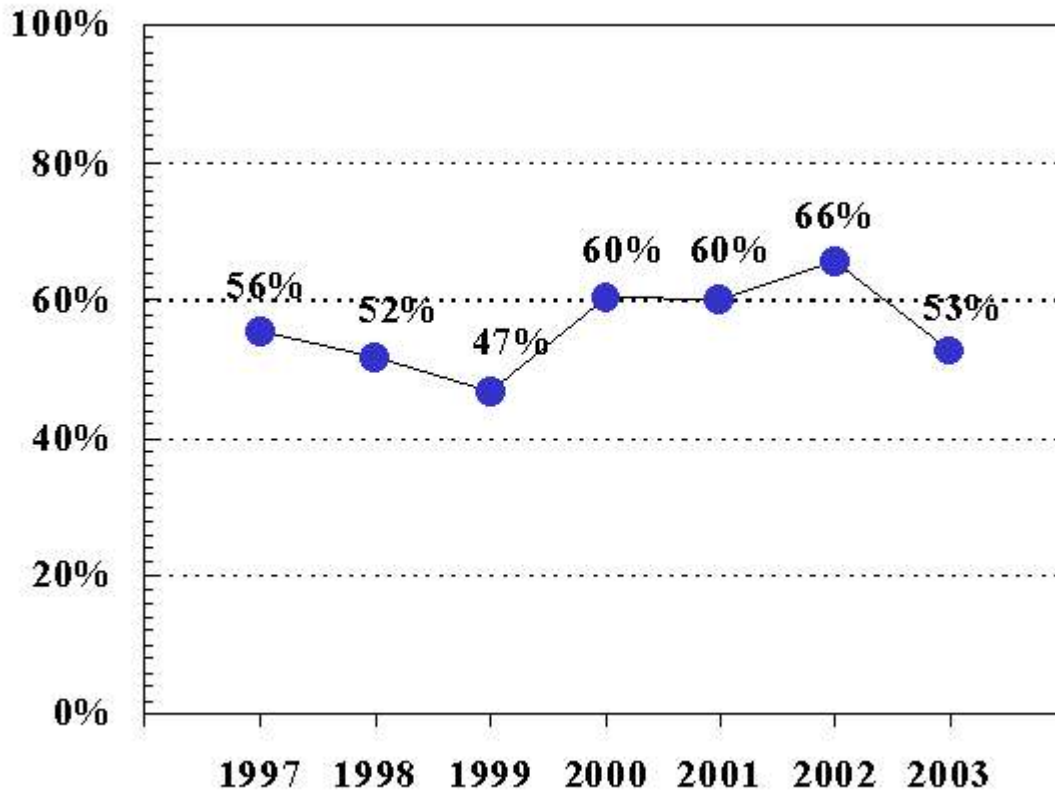
	2002 (n=201)	2003 (n=314)
No need to	-	56.7%
I do not like carrying a laptop on campus	19.3%	15.8%
Cannot afford a wireless card	3.0%	4.5%
The wireless locations are not convenient for me	7.8%	3.9%
There are not enough wireless locations on campus	0.0%	2.6%
Too complicated to set up	-	2.4%
Other	18.6%	14.2%

Training

Interest in training dropped substantially this year to 53%. The top training areas preferred continue to be web page development and databases.

25. Would you like training in computing?

Interest in Training



26. In what areas would you like to have training?

	2003 (n=178)
Databases	16%
Web page development	15%
Excel	8%
Programming	7%
Word	6%

Rules of the Road

33% (the same figure as last year) are aware of the “Rules of the Road” campaign. This is a substantially greater level of awareness than among the student population (19%), at which the campaign was ostensibly targeted. There was a measurable drop in the effectiveness of posters, which were not distributed to departments last year.

27. Have you seen or heard of the “Rules of the Road,” a campaign effort by the UW about the appropriate use of campus computing resources?

33% (the same figure as last year) are aware of the “Rules of the Road” campaign.

28. Where have you seen or heard of the “Rules of the Road?”

	2002 (n=85)	2003 (n=132)
Email	36.1%	36.4%
News articles	35.5%	35.2%
WiscWorld activation screen	24.7%	25.2%
Posters	40.4%	23.7%
Friend	8.3%	10.2%
Streaming media	3.6%	5.4%
Website	-	30.0%
Other	-	14.5%

Demographics

29. What is your classification?

weighted	2003 (n=462)
Tenured Faculty	9.8%
Untenured Faculty	7.9%
Instructional Academic staff	9.1%
Non-instructional Academic staff	22.5%
Classified	32.0%
Limited/Other	5.1%
Not ascertained	13.7%

30. What is your department or unit?

	2003 (n=462)
Medical School	20.6%
Non-academic (Administrative Offices)	14.8%
College of Letters & Science	14.5%
College of Ag/Life Sciences	8.6%
Graduate School	5.4%
College of Engineering	5.3%
DoIT	4.5%
School of Education	4.2%
School of Veterinary Medicine	2.7%
School of Business	2.3%
Division of Continuing Studies	1.2%
School of Nursing	1.1%

	2003 (n=462)
School of Pharmacy	1.1%
Law School	1.1%
Military	1.0%
School of Human Ecology	0.9%
International studies	0.7%
School of Library and Information Sciences	0.6%
Not ascertained	14.8%

31. In what one area would you recommend DoIT improve?

	2003 (n=160)
Help Desk, tech support, service	49%
Prices, too costly	14%
Training class	10%
Tech Store - general	8%
Network, faster, better	4%
